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ABSTRACT

This position paper considers the complex relation between phonemic awareness and reading. The paper seeks to define phonemic awareness (although there is no single definition), stating that it is typically described as an insight about oral language and in particular about the segmentation of sounds that are used in speech communication. It also differentiates between phonemic awareness and phonological awareness, terms which are sometimes used interchangeably. The paper discusses many aspects of phonemic awareness, including research findings (and how they might be misused or overgeneralized), and how phonemic awareness can be taught. The paper contends that the following teacher suggestions will lead to the development of phonemic awareness and success in learning to read: offer students a print-rich environment within which to interact; engage students with surrounding print as readers/writers; engage children in language activities that focus on both the form and the content of spoken and written language; provide explicit explanations in support of student's discovery of the alphabetic principle; and provide opportunities for students to practice reading/writing for real reasons in a variety of contexts to promote fluency and independence. An extensive list of suggested readings concludes the paper. (NKA)

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PHONEMIC AWARENESS and the Teaching of Reading

A Position Statement from the Board of Directors of the International Reading Association

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Much has been written regarding phonemic awareness, phonics, and the failure of schools to teach the basic skills of reading. The Board of Directors offers this position paper in the hope of clarifying some of these issues as they relate to research, policy, and practice.

We view research and theory as a resource for educators to make informed instructional decisions. We must use research wisely and be mindful of its limitations and its potential to inform instruction.

What is phonemic awareness?

There is no single definition of phonemic awareness. The term has gained popularity in the 1990s as researchers have attempted to study early-literacy development and reading disability. Phonemic awareness is typically described as an insight about oral language and in particular about the segmentation of sounds that are used in speech communication. Phonemic awareness is characterized in terms of the facility of the language learner to manipulate the sounds of oral speech. A child who possesses phonemic awareness can segment sounds in words (for example, pronounce just the first sound heard in the word *top*) and blend strings of isolated sounds together to form recognizable word forms. Often, the term *phonemic awareness* is used interchangeably with the term *phonological awareness*. To be precise, phonemic awareness refers to an understanding about the smallest units of sound that make up the speech stream: phonemes. Phonological awareness encompasses larger units of sound as well, such as syllables, onsets, and rimes. We use the term phonemic awareness in this document because much of the theoretical and empirical literature focuses specifically on phonemes. We also choose to use this term because of its more common use in the professional literature and in professional discussions.

Why the sudden interest in phonemic awareness?

The findings regarding phonemic awareness are not as new to the field of literacy as some may think, although it is only in recent years that they have gained wide attention. For over 50 years discussions have continued regarding the relation between a child's awareness of the sounds of spoken words and his or her ability to read. In the 1940s some psychologists noted that children with reading disabilities were unable to differentiate the spoken word into its sounds and put together the sounds of a word. Psychological research intensified during the 1960s and 1970s. Within the reading educational community there was research (for example, the "First-Grade Studies" in 1967) hinting at the important relation between sound awareness and learning to read.

Recent longitudinal studies of reading acquisition have demonstrated that the acquisition of phonemic awareness is highly predictive of success in learning to read—in particular in predicting success in learning to decode. In fact, phonemic awareness abilities in kindergarten (or in that age range) appear to be the best single predictor of successful reading acquisition. There is converging research evidence to document this relation, and few scholars would dispute this finding. However, there is considerable disagreement about what the relation means in terms of understanding reading acquisition and what the relation implies for reading instruction.

Isn't phonemic awareness just a 1990s word for phonics?

Phonemic awareness is not phonics. Phonemic awareness is an understanding about spoken language. Children who are phonemically aware can tell the teacher that *bat* is the word the teacher is representing by saying the three separate sounds in the word. They can tell you all the sounds in the spoken word *dog*. They can tell you that, if you take the last sound off *cart*, you would have *car*. Phonics, on the other hand, is knowing the relation between specific, printed letters (including combinations of letters) and specific, spoken sounds. You are asking children to show their phonics knowledge when you ask them which letter makes the first sound in *bat* or *dog* or the last sound in *car* or *cart*. The phonemic awareness tasks that have predicted successful reading are tasks that demand that children attend to spoken language, not tasks that simply ask students to name letters or tell which letters make which sounds. In fact, if phonemic awareness just meant knowledge of letter-sound relations, there would have been no need to coin a new term for it.

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How does phonemic awareness work to facilitate reading acquisition?

That phonemic awareness predicts reading success is a fact. We can only speculate on why the strong relation exists. One likely explanation is that phonemic awareness supports understanding of the alphabetic principle—an insight that is crucial in reading an alphabetic orthography. The logic of alphabetic print is apparent to learners if they know that speech is made up of a sequence of sounds (that is, if they are phonemically aware). In learning to read, they discover that it is those units of sound that are represented by the symbols on a page. Printed symbols may appear arbitrary to learners who lack phonemic awareness.

If phonemic awareness is the best predictor of success in beginning reading, shouldn't we put all our time and effort in kindergarten and early reading into developing it?

Most researchers in this area advocate that we consciously and purposefully attend to the development of phonemic awareness as a part of a broad instructional program in reading and writing. Certainly, kindergarten children should have many opportunities to engage in activities that teach them about rhyme, beginning sounds, and syllables. How much time is needed for this kind of focused instruction is something only the teacher can determine based on a good understanding of the research on phonemic awareness and of his or her students' needs and abilities. Research suggests that different children may need different amounts and forms of phonemic awareness instruction and experiences. The research findings related to phonemic awareness suggest that although it might be necessary it is certainly not sufficient for producing good readers. One thing is certain: We cannot give so much attention to phonemic-awareness instruction that other important aspects of a balanced literacy curriculum are left out or abandoned.

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Is phonemic awareness a single, momentary insight? Or, is it best described as a skill that develops gradually over time?

Phonemic awareness has been measured using a variety of tasks that appear to tap into an individual's ability to manipulate the sounds of oral language. However, some tasks may require a more sophisticated understanding of sound structures than others. For example, rhyming appears much earlier than segmentation abilities for most children. Also, it seems to matter that children can hear the sounds of a spoken word in order, but it is not clear how early or late this ability does or should develop. Researchers are still working to identify the kinds of tasks and what aspects of phonemic awareness they might tap. It appears from the research that the acquisition of phonemic awareness occurs over time and develops gradually into more and more sophisticated levels of control. Some research suggests that there is a diversity of developmental paths among children. How much control is necessary for the child to discover the alphabetic principle is still unclear. There is no research evidence to suggest that there is any exact sequence of acquisition of specific sounds in the development of phonemic awareness, only that there is increasing control over sounds in general.

It has been stressed that phonemic awareness is an oral language skill and that it has nothing to do with print, letters, or phonics. Is this true?

It is true that phonemic awareness is an insight about oral language, and that you can assess phonemic awareness through tasks that offer no reference to print. However, to suggest that there is no relation between the development of phonemic awareness and print is misleading. There is evidence to suggest that the relation between phonemic awareness and learning to read is reciprocal: phonemic awareness supports reading acquisition, and reading instruction and experiences with print facilitate phonemic awareness development. The question remains as to the amount and forms of phonemic awareness one must have in order to profit from reading instruction that is focused on decoding. For instance, some research suggests that the abilities to blend and isolate sounds in the speech stream support reading acquisition while the ability to delete sounds from spoken words is a consequence of learning to read. The precise relation between phonemic awareness abilities and reading acquisition remains under investigation.

How can phonemic awareness be taught?

The answer to this question has both theoretical and practical implications. Theorists interested in determining the causal contribution of phonemic awareness to learning to read have conducted experimental studies in which some students are explicitly taught phonemic awareness and some are not. Many of the early studies in this genre focused on treatments that emphasize oral language work only. The findings from these studies suggest phonemic awareness can be taught successfully.

More recently, there have been studies of phonemic awareness training that combine and contrast purely oral language approaches to the nurturing of phonemic awareness abilities, with approaches that include interaction with print during the training. These studies suggest that programs that encourage high levels of student engagement and interaction with print (for example, through read-alouds, shared reading, and invented spelling) yield as much growth in phonemic awareness abilities as programs that offer only a focus on oral language teaching. These studies also suggest that the greatest impact on phonemic awareness is achieved when there is both interaction with print and explicit attention to phonemic awareness abilities. In other words, interaction with print combined with explicit attention to sound structure in spoken words is the best vehicle toward growth.

Some research suggests that student engagement in writing activities that encourage invented spelling of words can promote the development of phonemic awareness. These findings also are consistent with continuing research into the sources of influence on phonemic awareness abilities before students enter school. It is clear that high levels of phonemic awareness among very young children are related to home experiences that are filled with interactions with print (such as being read to at home, playing letter games and language play, and having early writing experiences).

Do all children eventually develop phonemic awareness? Shouldn't we just let them develop this understanding naturally?

Naturally is a word that causes many people difficulty in describing language development and literacy acquisition. In so far as it is natural for parents to read to their children and engage them with print and language, then phonemic awareness may develop naturally in some children. But if we accept that these kinds of interactions are not the norm, then we have a great deal of work to do in encouraging parents to engage their young children with print. We need to provide the information, the tools, and the strategies that will help them ensure that their young children will be successful in learning to read.

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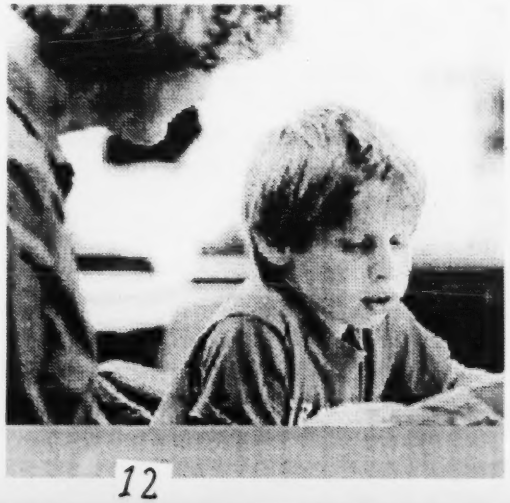
In schooling, the same advice holds true. Most children—estimated at more than 80%—develop phonemic awareness by the middle of first grade. Is this natural? Yes, if the natural model of classroom life includes opportunities to engage with print in a variety of ways and to explore language. However, we know that there are many classrooms where such engagement and explicit attention to sounds and print are not natural. We must equip teachers with the information, tools, and strategies they need to provide these kinds of learning opportunities in their classrooms.

The problem is most severe in terms of consequences when the students from economically disadvantaged homes, where the resources and parent education levels are lowest, enter schools that have limited resources and experience in promoting engagement with print. The students who need the most attention may be those who receive the least. We have a responsibility in these situations to not rely on the "natural" and to promote action that is direct, explicit, and meaningful.



What does this mean for classroom practice?

First, it is critical that teachers are familiar with the concept of phonemic awareness and that they know that there is a body of evidence pointing to a significant relation between phonemic awareness and reading acquisition. This cannot be ignored.

Many researchers suggest that the logical translation of the research to practice is for teachers of young children to provide an environment that encourages play with spoken language as part of the broader literacy program. Nursery rhymes, riddles, songs, poems, and read-aloud books that manipulate sounds may be used purposefully to draw young learners' attention to the sounds of spoken language. Guessing games and riddles in which sounds are manipulated may help children become more sensitive to the sound structure of their language. Many activities already used by preschool and primary-grade teachers can be drawn from and will become particularly effective if teachers bring to them an understanding about the role these activities can play in stimulating phonemic awareness.

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What about the 20% of children who have not achieved phonemic awareness by the middle of first grade?

The research on this statistic is as clear as it is alarming. The likelihood of these students becoming successful readers is slim under current instructional plans.

We feel we can reduce this 20% figure by more systematic instruction and engagement with language early in students' home, preschool, and kindergarten classes.

We feel we can reduce this figure even further through early identification of students who are outside the norms of progress in phonemic awareness development, and through the offering of intensive programs of instruction.

Finally, there may be a small percentage of the students who may have some underlying disability that inhibits the development of phonemic awareness. Several scholars speculate that this disability may be at the root of dyslexia. More research is needed in this area, however. There is some promise here in the sense that we may have located a causal factor toward which remedial assistance can be tailored.

Some people advocate that primary teachers allocate large amounts of time to teaching students how to perform better on phonemic awareness tasks. There are no longitudinal studies that support the effectiveness of this practice in increasing the reading achievement of the children when they reach the intermediate grades.

What position does the International Reading Association take regarding phonemic awareness and the teaching of reading?

The International Reading Association already has issued a position paper on the role of phonics in the teaching of reading. That paper stresses the importance of phonics in a comprehensive reading program.

In this position statement we have attempted to elaborate on the complex relation between phonemic awareness and reading. We do so without taking away from our commitment to balance in a comprehensive reading program.

On the positive side, research on phonemic awareness has caused us to reconceptualize some of our notions about reading development. Certainly, this research is helping us understand some of the underlying factors that are associated with some forms of reading disability. Through the research on phonemic awareness we now have a clearer theoretical framework for understanding why some of the things we have been doing all along support development (for example, work with invented spelling). Additionally, the research has led us to new ideas that we should continue to study.

On the negative side, we are concerned that the research findings about phonemic awareness might be misused or overgeneralized. We are very concerned with policy initiatives that require teachers to dedicate specific amounts of time to phonemic awareness instruction for all students, or to policy initiatives that require the use of particular training programs for all students. Such initiatives interfere with the important instructional decisions that professional teachers must make regarding the needs of their students. We feel the following suggestions for good reading instruction will lead to the development of phonemic awareness and success in learning to read:

- Offer students a print-rich environment within which to interact;
- Engage students with surrounding print as both readers and writers;
- Engage children in language activities that focus on both the form and the content of spoken and written language;
- Provide explicit explanations in support of students' discovery of the alphabetic principle; and
- Provide opportunities for students to practice reading and writing for real reasons in a variety of contexts to promote fluency and independence.

We must keep in mind, though, that it is success in learning to read that is our goal. For students who require special assistance in developing phonemic awareness, we should be prepared to offer the best possible instruction and support.

Suggested Readings

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